


WHAT IS CLAIMED IS:

Sub A1 
1. A storage system wherein the system receives a command to which an ID number for identifying one of a plurality of OSs is attached, derives said ID number, and returns a response that indicates whether to process or reject the access to a logical volume with said ID number attached thereto, depending on whether the logical volume is accessible for said command.

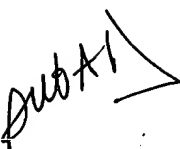
2. The storage system as recited in claim 1, wherein said logical volume consists of a plurality of magnetic disk units.

3. The storage system as recited in Claim 1, wherein the priority of processing for access may change, according to the OS's ID number attached to said command received.

4. The storage system as recited in Claim 1, wherein whether to process or reject the access requested by said command received is determined, based on preset conditions and said response is returned.

5. The storage system as recited in Claim 1, wherein the system includes tables in which specification of whether

00018795-080101
T07080-96/87660

Sub A1  to process or reject the access requested by said command, dependent on said OS's ID number, is retained.

6. The storage system as recited in Claim 1, wherein the system returns the response which is determined, depending on combination of a plurality of types of ID numbers attached to said command received.

FOI 9628760 7. A virtual private volume control method, wherein servers on which a plurality of OSs run communicate with disk apparatus in such a manner that, when one of said OSs on a server issues an access command, said server assigns an ID number for identifying the OS and sends the command with the assigned ID number attached thereto; said disk apparatus receives the sent command, derives said ID number, and returns a response that indicates whether to process or reject the access to a logical volume with said ID number attached thereto, depending on whether the logical number is accessible to the derived ID number; and said server receives said response.

8. The virtual private volume control method as recited in Claim 7, wherein said server codes said OS's ID number into a data frame and sends the data frame as the

Sub A1
command and said disk apparatus receives the data frame and derives said ID number therefrom.


9. The virtual private volume control method as recited in Claim 7, wherein the priority of processing for access may change, according to the OS's ID number attached to said command received.

10. The virtual private volume control method as recited in Claim 7, wherein whether to process or reject the access requested by said command received is determined, based on preset conditions and said response is returned.

11. The virtual private volume control method as recited in Claim 7, wherein said disk apparatus includes tables in which specification of whether to process or reject the access requested by said command, dependent on said OS's ID number, is retained.

12. OS Management Software, wherein when at least one of a plurality of OSs issues an access command, said software assigns an ID number for identifying the OS, stores the assigned ID number into internal memory of a server, receives a response to which said ID number is attached, and returns the response to said OS.

09918793-08010
T01780-9628T660

PubA1 

13. A storage system wherein the system receives a command to which an ID number for identifying one of a plurality of OSs and an ID number for identifying one of plurality of applications are attached, derives said both ID numbers, and returns a response that indicates whether to process or reject the access to a logical volume with said ID numbers attached thereto, depending on whether the logical volume is accessible for said command.

14. The storage system as recited in Claim 13, wherein said logical volume consists of a plurality of magnetic disk units.

15. The storage system as recited in Claim 13, wherein the priority of processing for access may change, according to the OS's and application's ID numbers attached to said command received.

16. The storage system as recited in Claim 13, wherein whether to process or reject the access requested by said command received is determined, based on preset conditions and said response is returned.

K

09913796, 080101
TOP SECRET 96/2/660

DUBAI

17. The storage system as recited in Claim 13, wherein the system includes tables in which specification of whether to process or reject the access requested by said command, dependent on each of said OS's and application's ID numbers, is retained.

18. The storage system as recited in Claim 13, wherein the system returns the response which is determined, depending on combination of a plurality of types of ID numbers attached to said command received.

19. A virtual private volume control method, wherein servers on which a plurality of applications and a plurality of OSs run communicate with disk apparatus in such a manner that, when one of said applications under one of said OSs on a server issues an access command, said server assigns an ID number for identifying the application as well as an ID number for identifying the OS, sends the command with both assigned ID numbers attached thereto; said disk apparatus receives the sent command, derives said both ID numbers, and returns a response that indicates whether to process or reject the access to a logical volume with said ID numbers attached thereto, depending on whether the logical volume is accessible to the derived ID numbers; and said server receives said response.

09918796.080101

Sub A1

20. The virtual private volume control method as recited in Claim 19, wherein said server codes said application's and OS's ID numbers into a data frame and sends the data frame as the command, and said disk apparatus receives the data frame and derives said ID numbers therefrom.

21. The virtual private volume control method as recited in Claim 19, wherein the priority of processing for access may change, according to the application's and OS's ID numbers attached to said command received.

22. The virtual private volume control method as recited in Claim 19, wherein whether to process or reject the access requested by said command received is determined, based on preset conditions and said response is returned.

23. The virtual private volume control method as recited in Claim 19, wherein said disk apparatus includes tables in which, specification of whether to process or reject the access requested by said command, dependent on each of said application's and OS's ID numbers, is retained.

00918795-080101

PubAI

24. OS Management Software wherein when at least one of a plurality of applications issues an access command, said software assigns an ID number for identifying the application and an ID number for identifying the OS under which the application operates, stores the assigned ID numbers into internal memory of a server, receives a response to which said ID numbers are attached, and returns the response to said application and OS.

0018795 080101